REMARKS

Responsive to the preliminary determination of lack of unity, Applicants provisionally elect Group II (claims 41-46), drawn to ionogels, with traverse.

Responsive to the election of species requirement, Applicants provisionally elect the species of Example 7, with traverse.

The reasons for traverse follow:

The position of the Official Action is that the ionogels are the common structural feature for the claims, and ionogels are known from the article of DAI et al. ("DAI").

DAI discloses that the preparation of silica aerogels, wherein an ionic liquid was used as a solvent in the process. In this process, TMOS, formic acid and ionic liquid were mixed and the final mixture gelled overnight before being cured at ambient temperature for 3 weeks. The entrapped ionic liquid was then extracted by refluxing in acetonitrile, and the IR measurements clearly show that all ionic liquid molecules were removed through extraction (See, e.g., page 243, left column first and second paragraphs of DAI).

On the contrary, the ionogels according to the invention are defined on specification page 2, at line 15, as continuous solid skeletons containing an ionic liquid, i.e., as a structure having the ionic liquid confined within a continuous solid network formed from at least one molecular precursor

selected, for example, from $Al(C_2H_5)_3$, $Al(OCH(CH_3)_2)_3$ Si $(OCH_3)_4$, $SnCl_4$ or PCl_5 (See, e.g., specification page 6 lines 31 to 34). Because the ionic liquid is confined in the network, the ionic liquid cannot flow out of the network, and the ionogels according to the present invention are very stable in aqueous medium.

The ionogels according to the present invention have very interesting properties because they look like solids, but the ionogels maintain the conduction properties of ionic liquids. For example, when used as electrolytic membranes, the ionogels show a better resistance to heat than membranes containing ionic liquids.

Accordingly, DAI cannot teach the claimed ionogels.

Moreover, in applying the same legal standard with similar claims, Applicants respectfully note that the International Search Authority did not determine the unity of invention as lacking. Thus, the Patent Office has the benefit of the search report, but fails to explain why a different legal conclusion was reached.

Furthermore, as to the election of species requirement, the position of the Official Action is that the species of ionogels disclosed, e.g., in Examples 5-11, are linked by claim 41, which is allegedly taught by DAI. However, as discussed previously, DAI does not teach a common structural feature with the claimed invention, e.g., <u>all ionic liquid molecules were removed through extraction</u>.

In light of the above discussion, it is believed to be apparent that the lack of unity determination and election of species requirement set forth in the outstanding Official action are improper and should be withdrawn. Therefore, a favorable action on the merits of all of the claims, in their full scope, is respectfully requested.

Should there be any matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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